

Fig. 1. Schematic diagram of methoxy mycolic acid synthase mmaA 4-mmaA 1 gene cluster of mycobacteria and location of forward A, and reverse D primers.

CTACTTCGCCAGCGTGAAC TGGTTGACGTCGATGTAGCCGACCCGGAACAGCTTGGCGCAGCCGGTCA
GGTATTTTCATGTACCGCTCGTAGACCTCTTCGGACTGGATCGCGATGGCCTCGCTTTTGTGTTCTGCA
GCGCCTCGGCCCACAGGTCGAGGGTCCTGGCGTAATGCGGCTGCAGCGACTGGCGGCGAGTCAGCGT
GAAACCCGTCTTCGCCGACTGTTCTCAACCATTTCATCGTCGGAGGTTGGCCCCCGGGAAGATTTG
GGTCGCGATGAACTTGAGAAAGCGGGCCAGCCACAACGTGAGCGGCAAGCCGTGGTTCGACCATCTGC
TGCTGGTTCAGGCCGGTGATCGTGTGCAGCAGCAACACGCCATCGGGCGGCAGGATTTTGTGGGCCCC
GGCGAAGAAGTCGGCGTGACGATCGTGGCCGAAGTGCTCGAACGCGCCGATCGACACGATGCGGTTCG
ACGGGCTCGTTGAACTGCTCCCATCCCGCCAGCAACACTCGCTGTGCGCGGGGTGTCCATCTCGTGC
AACGACTTCTGCACATGGGCGGCCTGGTTCTTCGACAATGTCAGGCCGACGACGTTGACGTCATACTG
CGCGATCGCGCGCCGCATGGTGGCGCCCCAGCCGCAACCGATATCGAGCAGCGTCATGCCGGGCTGCA
GACCTAGCTTGCCAGCGCCAGGTCGATCTTGGCGATCTGGGCCTCTTCCAGCGTCATGTCCTCGCGTT
CGAAATGCGCGCAGCTGTAGGTCTGGGTTCGGATCCAGGAACAGCCGGAAGAAGTCGTTCGGACAGGTC
GTAGTGTGCCTGCACGTCCTCGAAGTGCGGCGTTAGGTC*GTTGACCATgagggtgaatgcctttccggaccctaggtggcct*
ttcgggtcctgcaggaacgcaccgatgcttccccctcccccatgctcgaggcatgctatccgatacagggccgcccactaaaccgcatcgaatttgcagggtca
gggaacggatatgagcggacgagCTACTTGGTCATGGTGAAC TGGGCGACGTTGATTAGGCCTCTGCGGAAGCGCT
CCGCGCATCCGGTCAGATAGTGCATGAAGTTGTTGTAGACCTCTTCGGACTGTACGGCGATGGCGCGT
TCGCGGGCAGCCTGTAGGTTGGCGGCCCATGCATC*GAGAGTCCGTGCGTAGTGCT*GCTGTCAGCAGCTGG
ACATGCTCGATGGTGAAGCCCGCGGCCTGCGCATTGTGCGACAATGTCGGGCTCCGATGGCAGCTCGCC
GCCCCGGAAGATCGACTCCCGCAGGAATTTGAGGAATCGAAGGTTCGCTCATCGTCAGCGCAATGCCCT
GTTTCGTGCAGCCACCTGCGGTTCGTAGGTGAACAGGCTGTGCAGTAGCATCCGCCCCGTCATCGGGCAGG
ATGTCGTAGGAGCGTTCGAAGAACGTCAGATACCGCTCCTTTTTGAACGCGTCGAATGCCTCAAAGCT
GACGATCCGGTCGACGTTCTCTTCAAACCTCTTCCAGCCCTGCAGCCGGGCCCTCGGCGCGCCGTTGCGT
TCCGATTGCGGCCAGGCGGTCTTTGCTGCGTTCATAGTGATTCCGGCTGAGCGTGAGGCCGATGACATT
GACGTCGTACTTCTCCACGGCCCCGAACGAGCGCCCCGCCCCACCCGCAACCCACGTCGAGTAGCGTCA
TCCCCGGTTCGAGGTTTCAGCTTGTCCAACGCCAGATCCACCTTGCCAGTTGCGCCTCTTCCAGCGTCA
TATCGTCACGCTCGAAATAGGCGCAGGTGTAGACCCAGGTGGGATCGAGGAACAACGCGAAGAAGTC
ATCCGAAATGTCGTAAGCCGACTGTGACTCTTCGTAATATGGTCTCAGCTTGGCCAT

Fig. 2. Sequence of *mmaA2* and *mmaA1* gene with an intergenic region of 166 base pair (shown in lower case. Location of forward A, sequence ID 1 and reverse primer D, sequence ID 2. Both primer sequences are underlined and italicized.



Fig. 3. PCR amplification of different mycobacterial genomic DNAs with primers A and D (lanes 1- 15): 1. *M.avium* 2. *M.bovis* 3. *M.chelonae* 4. *M.fortuitum* 5. *M.intracellulare* 6. *M.kansasii* 7. *M.phlei* 8. 100 bp DNA ladder 9. *M.marinum* 10. *M.scrofulaceum* 11. *M.smegmatis* 12. *M.szulgai*, 13. *M.tuberculosis* and 14. negative control. AD indicates 363 bp-amplified product.

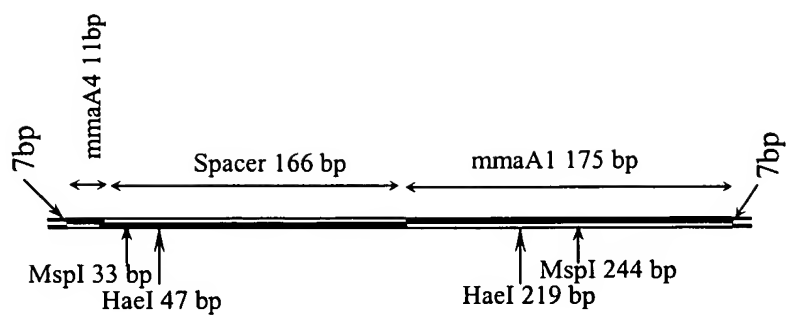


Fig. 4. Line diagram showing restriction endonuclease map of HaeI and MspI within AD.

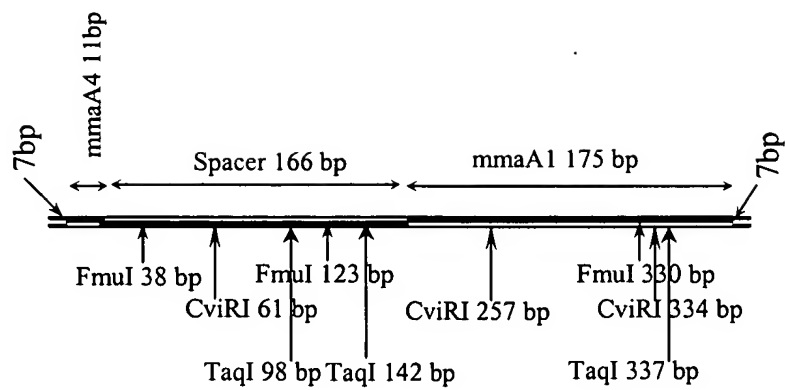


Fig. 5. Line diagram showing restriction endonuclease map of FmuI, CviRI and TaqI within AD.

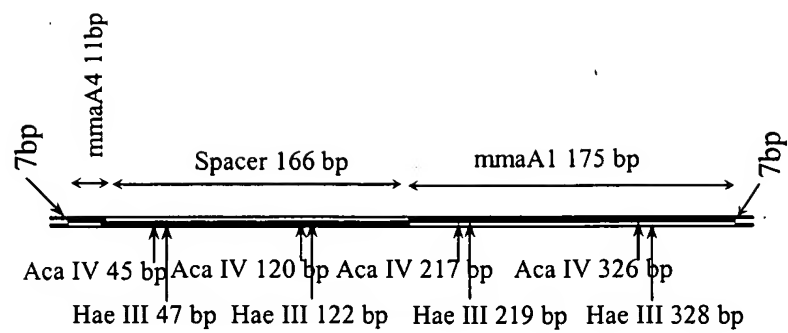


Fig. 6. Restriction map of AD showing distribution of the sites of restriction endonucleases AcaIV and HaeIII.

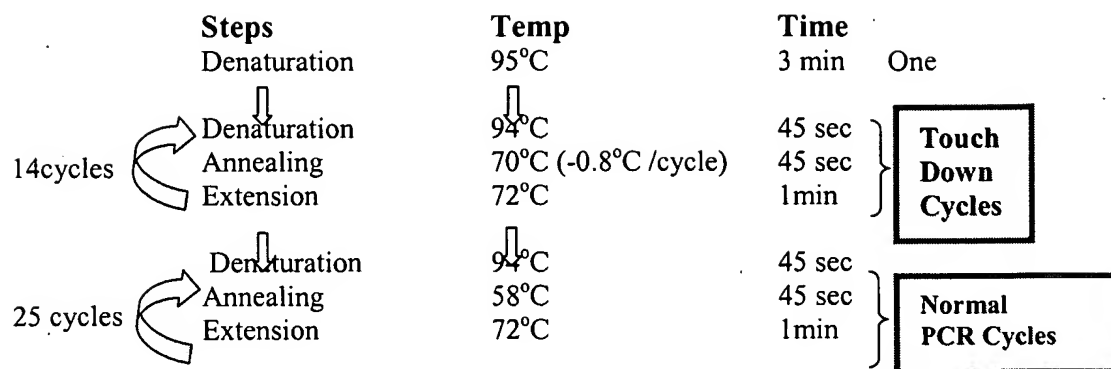


Fig. 7. Line diagram showing different steps of PCR reaction